MA 602 Assessment & Evaluation in Mathematics Education

Rivier College

Course Syllabus

Spring, 2004, 3 graduate credits,

**Course Instructor:** Darien Lauten, Ph.D.
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**Office Hours:**  
M: 2:00 – 2:30 (Mem), 4 – 5 PM (Regis)
T: 10:00 - 12:00 (Regis), 2:00 - 4:00 (Regis)
W: 2:00 – 2:30 (Mem), 4 – 5 PM (Regis)

Note that the ½ hour office hours are conducted in the classroom of the course they precede. All students from any course are welcome during those times.

Other hours by appointment, contact Nola Beane at 897-8571 or macsoffice@rivier.edu

**Brief Course Description**
This course focuses on assessment of student learning as a means to improve instruction. Class participants develop expertise in the areas of performance assessment; journal writing; portfolios; problem solving; presentations; projects; mathematics in context; mathematics modeling; special education; observation and clinical interview techniques. The course addresses local, state, national, and international testing in mathematics. Students engage in extensive interaction and make many presentations.

**Required Course Textbooks and materials**
TI-83+ or comparable graphing calculator. (Available at WallMart, Kmart, Staples, etc.)
An email address and access to the internet. You can get a free email address from Information Technology (IT) in Sylvia Trottier Hall. As a Rivier student, email and high-speed internet access are available to you on campus in Regina library and in the Sylvia Trottier computer labs.
NHMathEd listserv. You must join and regularly read notices on this free email listserv. Membership on this listserv is required for all students in the MAT-Math program.
TI-83+ or comparable graphing calculator.
Membership in the “National Council of Teachers of Mathematics” (NCTM). You are required to receive and read the email news briefings, newsletters, and a monthly journal. [www.nctm.org](http://www.nctm.org)
The following books must be ordered directly from NCTM or used a used copy purchased through an internet-based used bookseller.
NCTM (2000), "Principles and Standards for School Mathematics." Reston, VA: NCTM (Many of you already have this.)

** Note: You are required to read on-reserve materials in Regina Library on the Rivier College campus and mathematics education and math-activity books in the Regis Conference Room. This will involve your having to make some arrangements to be on campus at times other than scheduled class time.

Course Goal:
The course goal is to help students develop proficiency in instructional theory and practice. Class participants are expected to develop their ability to apply their knowledge of how children learn mathematics, to use appropriate instructional practices, to create an environment which promotes learning, to use appropriate assessment techniques, to utilize appropriate resources.

Course Objectives:
Class participants will be expected to demonstrate their ability to merge their knowledge of mathematics with their knowledge of teaching and assessment in ways that help them:
Use the multiple methods of assessment in mathematics to improve instruction and student learning
Use assessment techniques to be able to know and describe what each student knows and can do
Link assessment to grading
Know the state and national laws that affect assessment practices
Use instructional methods suitable for special education students who are mainstreamed in their classes
Understand and demonstrate the ability to discuss the purposes for, content in, results of, and research related to the various district, state, national, and international mathematics evaluations.

Conduct of course:
The graduate-level course will be conducted in a seminar format. Class participants are required to join class discussions, and contribute worthwhile comments and questions that reflect their assigned readings and previous class discussions. Participants are required to assume a leadership role in facilitating at least one class discussion, facilitate the exchange of ideas, actively encourage all class participants to participate in small- and large-group class discussions, seek out opportunities to work directly in small groups with all other class participants; use e-mail and the world-wide-web to access documents pertinent to mathematics education, and observe and reflect on secondary mathematics classes. All submitted papers must be properly cited according to guidelines set forth in the APA Manual of Style. This course is conducted in a manner consistent and accepts the viewpoint represented in the documents published by the National Council of Teachers of Mathematics and the NH Department of Education.

Assignments:
You are expected to submit all assigned work on time. If you notify me ahead of time about unexpected professional travel or other unexpected responsibilities, sick children, etc. I will consider exceptions. However, I expect to know what's going on when assignments are not submitted on time.

Assessment
Essays, summaries, outlines, or notes on material read for or discussed in class
Evidence through class discussions and presentations of your understanding and mastery of course content, goals, and objectives.
Quizzes on the pedagogy and mathematics content studied. There will be no makeup quizzes.

Course Requirements and Expectations. You are expected to:
Actively engage in all class discussions and small group work.
Come to class prepared to join class discussions, and contribute worthwhile comments and questions that reflect assigned readings and previous class discussions.
Facilitate the exchange of ideas
Encourage all class participants to participate in small- and large-group class discussions
Communicate with the instructor and other classmates through email exchanges
Use the world-wide-web to access documents pertinent to mathematics education
Complete all assignments in a timely manner. More specific details will be available as the course progresses
Plan time to do required and extra reading in the Regis Library, and the Math Conference Room
Meet with other class participants in small groups to develop reports and projects
Engage in peer and self-assessment
Assume a leadership role in organizing, facilitating, seeking information and resources, and engaging others in class discussions and activities
Cite and completely reference all ideas and documents in your papers and discussions
All documents obtained on the internet must be NH or USA reports or articles (papers) from a peer-reviewed journal or published by the NCTM. Correctly cite all references.
Align your writing with that presented in the APA Manual of Style
Maintain a loose-leaf notebook that contains course handouts, your notes, and relevant materials you have collected from the internet (check sources and provide evidence of credibility), news-media, and other reliable sources
Attend all class meetings. Attendance will be taken. If you miss a class, you are responsible for submitting assigned work on the date due, getting the notes from a classmate, and making up all missed work. If you must be excused from class, please inform me ahead, if possible, by note, e-mail, or phone message. Please arrange ahead to submit your work and for someone to collect handouts for you. I do not and cannot assume responsibility for providing you with materials for classes you miss.
Regularly (every few days or so) check your email for messages about the course and access the internet for assignments at specified locations
Place in your portfolio in the Regis Conference Room file evidence of your mastery of the course goals and objectives

Methods of Assessment and Computation of grades
The course grade will be based on submitted papers, classroom attendance and engagement, and presentations. Graded work is usually based on a 0 - 5 scale. 5 and 4 are A level work, 3 is B level work, 2 is C level, 1 is D level and 0 is reserved for not-submitted or unacceptable work.

Readings:
For articles use the on-line Data Base. Go to www.rivier.com. At bottom of page select Regina Library, Follow directions for accessing reviewed educational documents.

Reference:
The references listed at the end of all articles used in this course are excellent. You should familiarize yourself with the literature identified. Many of the references are available on-line through the ERIC database, accessible through the Rivier College website. The Rivier College library has an extensive collection of mathematics-edcation materials as does the Mathematics Conference Room on the third floor of Regis. Both collections hold numerous reviewed or published student activities. You are expected to adapt and modify published activities for lessons you develop for classroom presentations.